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W. N. BOWMAN.
ATTACHMENT FOR LINOTYPE MACHINES.
APPLICATION FILED MAY 27, 1903.

Fig. 1.

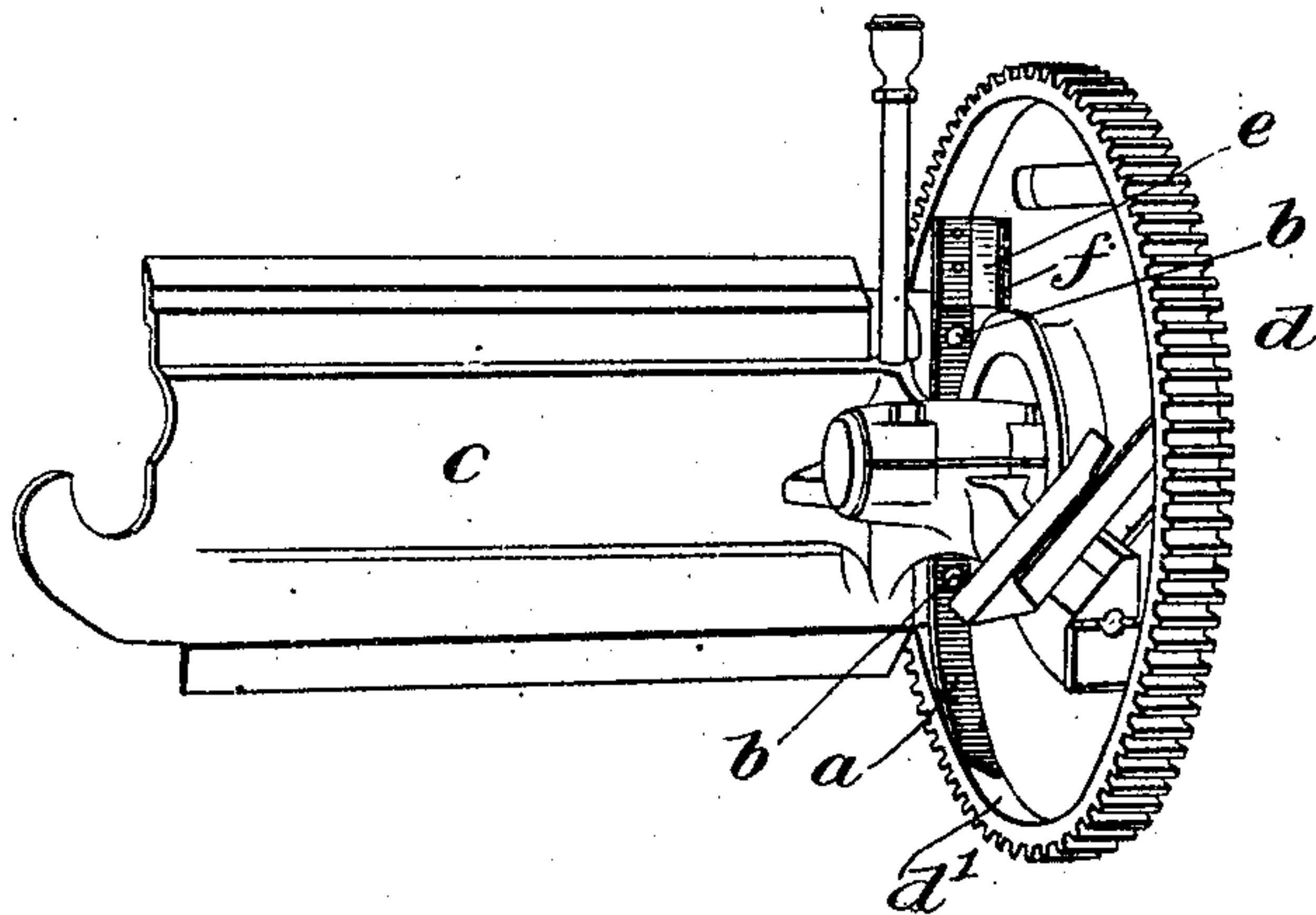


Fig. 2.

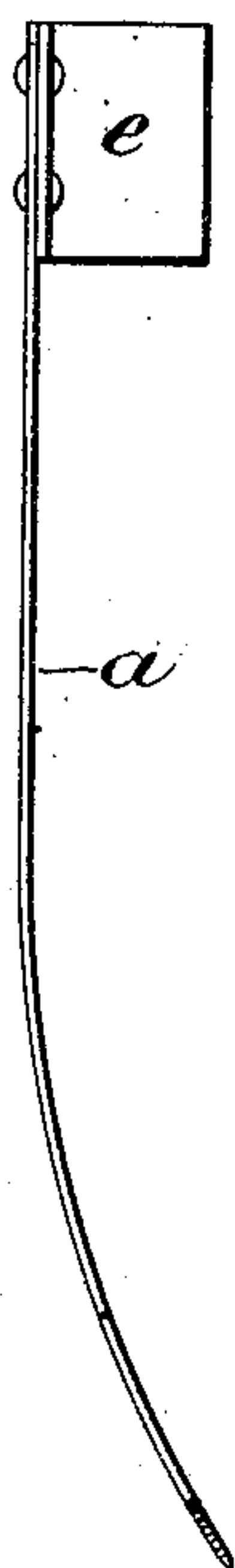
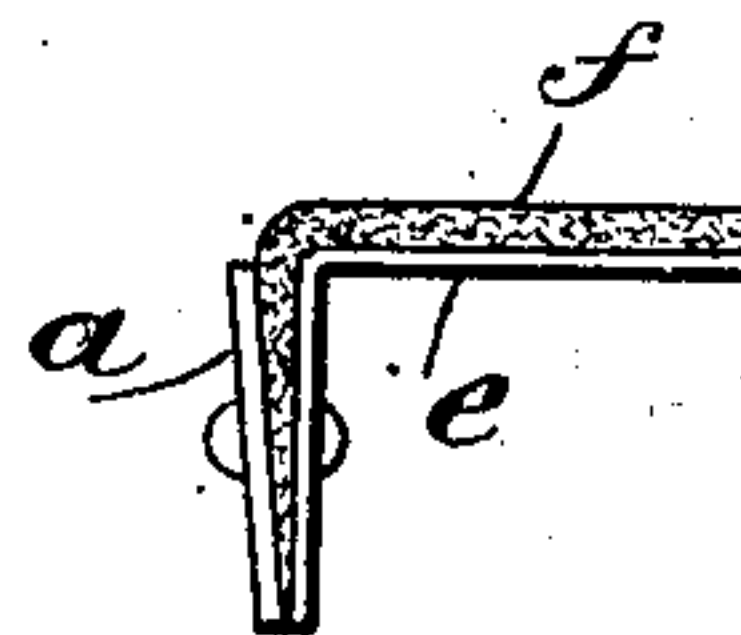


Fig. 3.



WITNESSES:

Edward Thorpe
Isaac B. Owens

INVENTOR

Wilber N. Bowman

BY

Mumford
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILBUR N. BOWMAN, OF PIERRE, SOUTH DAKOTA.

ATTACHMENT FOR LINOTYPE-MACHINES.

No. 844,917.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed May 27, 1903. Serial No. 158,954.

To all whom it may concern:

Be it known that I, WILBUR N. BOWMAN, a citizen of the United States, and a resident of Pierre, in the county of Hughes and State of South Dakota, have invented a new and Improved Attachment for Linotype-Machines, of which the following is a full, clear, and exact description.

This invention relates to means for cleaning the back of the mold of a linotype-machine and protecting the slug-ejector and mold-wheel of the machine from the accumulations of type-metal calculated to interfere with the proper action of the several parts, and is designed to enable the spout of the melting-pot to make a perfect joint with the mold and prevent "back squirts," which cause the type-metal to escape from its proper channel and produce "high slugs." It is likewise designed to prevent high slugs caused by molten metal dropped in front of the ejector-blade and pressed onto the back of the slug while being ejected, also to prevent type-metal dropping onto the mold-wheel from being carried up between the mold-wheel and the ejector-blade guide, thereby clogging and stopping the machine and causing considerable trouble and loss of time. Such objects I accomplish by means of the device herein shown and described, consisting of a guard adapted to fill the open space at the top of the mold-slide, thus preventing metal from dropping in front of the ejector-blade, the end of the guard bearing against the periphery of the rim of said wheel, so as to scrape therefrom all accumulations of type-metal, and a wiper arranged in the path of the mold adapted to oil the walls of the mold-orifice, thus enabling the slug to be easily ejected and a perfect "lock-up" to be obtained between the mold and the spout of the melting-pot, thereby preventing high slugs commonly caused by metal adhering to the back of the mold.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which drawings like characters of reference indicate like parts throughout the views, and in which—

Figure 1 is a perspective view of a device embodying my invention applied to a mold-slide in operative relation with the rear face of a mold-disk. Fig. 2 is a side elevation of my device detached, and Fig. 3 is a top plan of a wiper forming part of my invention.

As illustrated in the drawings, a guard *a*,

preferably made of spring metal, is fastened by means of screws *b* or otherwise to the front end of a mold-slide *c*. The lower end of the guard *a* is curved or inclined laterally and bears tightly against the inner periphery of the rim *d'* of a mold-wheel *d* at the rear thereof, so that as the mold-wheel turns the lower end of the guard riding on this rim scrapes therefrom all the accumulations of type-metal. The lower portion of the guard *a* is bent or inclined longitudinally, so that as the inner edge of the guard bears against the face of the mold-wheel the lower portion of the guard extends across the face of the wheel in a curved line, adapted to present a shearing edge to any metal accumulating on the face of the wheel and scrape such metal therefrom. The upper end of the guard *a* preferably projects into or nearly into contact with the rim *d'* of the mold-wheel, thus constituting an effective barrier or guard against metal back-squirting from the metal-pot into the vicinity of the ejector and the front end of the mold-slide.

A wiper is applied to the rear face of the mold-wheel, and preferably consists of a bent plate *e*, attached to the upper end of the guard *a*, bearing against the face of the mold-wheel in the path of the mold thereof, and provided on its front or working side with a cover *f*, which is preferably formed of felt or other absorbent material adapted to be saturated with oil and graphite and to ride over the rear face of the mold as it travels in its path, thus effectually oiling the walls of the mold-orifice, so as to prevent waste metal from adhering thereto and forming high slugs and permitting the slugs to be readily ejected from the mold.

In the construction herein shown and described I have embodied my invention in its preferred form. I do not desire to be limited to such construction, however, as other devices having similar capabilities may be used without departing from my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A linotype attachment, comprising a scraper mounted to bear against the inner periphery of the rim of the mold-disk, at the rear side thereof, said scraper riding on said rim as the mold-disk turns, to remove accumulated type-metal therefrom.

2. A linotype attachment, comprising a scraper mounted to bear against the inner

periphery of the rim of the mold-disk, at the rear side thereof, said scraper riding on said rim as the mold-disk turns, to remove accumulated type-metal therefrom, and said scraper being in the form of a spring-blade fastened at its intermediate portion and having one of its ends bearing on the rim, for the purpose specified.

3. The combination with the mold-disk and mold-disk slide of a linotype-machine, of a wiper comprising a plate mounted on the said slide and engaging the rear face of the mold-disk, the plate having means on one face for carrying a lubricant, said means comprising a fabric bearing on the mold-disk, and having the lubricant absorbed therein.

4. The combination with the mold-disk and mold-disk slide of a linotype-machine, of a blade fastened to the front end of the slide and extending across the rear face of the disk to form a barrier, substantially as described.

5. The combination with the mold-disk and mold-disk slide of a linotype-machine, of a blade fastened to the front end of the slide and extending across the rear face of the disk to form a barrier, said blade being fastened at its intermediate portion and having its ends in contact with the rim of the mold-disk.

6. The combination with the mold-disk and mold-disk slide of a linotype-machine, of a blade fastened to the front end of the slide and extending across the rear face of the disk to form a barrier, said blade being fastened at its intermediate portion and having its ends in contact with the rim of the mold-disk, and a wiper attached to the upper end of the blade in the path of the mold.

7. The combination with the mold-disk and mold-slide of a linotype-machine, of a member fastened to the slide and having one end forming a spring-scraper bearing against the inner periphery of the rim of the mold-disk, and a wiper carried at the other end of the mold-disk in position to ride over the mold thereof, for the purpose specified.

8. A linotype attachment, comprising a spring-plate having one end forming a scraper, and a wiper attached to the other end portion.

9. A linotype attachment, comprising a spring-plate having one end forming a scraper, and a wiper attached to the other end portion, said wiper comprising a body and a mass of fabric attached thereto.

10. The combination with the mold-disk of a linotype-machine, of a combined scraper, guard, and wiper therefor at the rear face of said disk.

11. The combination with the mold-disk of a linotype-machine, of a guard at the rear face of the disk for preventing the metal from dropping in front of the ejector.

12. The combination with the mold-disk and mold-slide of a linotype-machine, of a guard carried by the front end of the mold-slide and serving to prevent the metal from dropping in front of the ejector.

13. The combination with the mold-disk and mold-slide of a linotype-machine, of a spring-plate secured to the front end of the slide and having one end engaging the rim of the disk.

14. The combination with the mold-disk of a linotype-machine, of a guard at the rear face of the disk, for preventing the metals from dropping in front of the ejector, and a wiper carried by the guard and bearing against the face of said disk.

15. An attachment for linotype-machines, comprising a spring-blade adapted to be secured intermediate of its ends at the rear of the mold-disk, with one end in contact with the inner periphery of the rim of the disk and its other end spaced a short distance from said rim.

16. An attachment for linotype-machines, comprising a spring-blade adapted to be secured intermediate of its ends at the rear of the mold-disk with one end in contact with the inner periphery of the rim of the disk and its other end spaced a short distance from said rim, and a plate secured to one end of the blade and having a covering of absorbent material on one face adapted to engage the inner rear side of said mold-disk.

17. An attachment for linotype-machines, comprising a curved spring-plate having at one end an angular member carrying absorbent material, said plate being adapted to be secured at one side of the mold-disk with its angular member parallel to the plane of the disk, and one end in contact with the inner periphery of the rim of the disk and its other end spaced a short distance from said rim.

18. The combination of a mold-disk of a linotype-machine, and a combined scraper and guard adapted to bear at one end against the rim of said disk, with one of the longitudinal edges of said scraper in contact with the rear face of said disk.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILBUR N. BOWMAN.

Witnesses:

C. B. BILLINGHURST,
V. L. CHIPMAN.